

(54) Title: DRIVE TRAIN WITH EXHAUST GAS UTILIZATION AND CONTROL METHOD

(57) Abstract: The invention relates to a drive train, comprising an internal combustion engine, an exhaust gas turbine, arranged in the flow of exhaust of the internal combustion engine, a crankshaft driven by the internal combustion engine, switchably connected by means of a hydrodynamic coupling to the exhaust gas turbine in driven connection such that the crankshaft is driven by the turbine, said hydrodynamic coupling comprising a primary impeller and a secondary impeller which together form a working chamber which may be filled with a working medium for torque transfer, the primary impeller being in driven connection with the exhaust gas turbine; the secondary impeller is in driven connection with the crankshaft; the primary impeller may be mechanically braked and locked in relation to a rotational movement such that the hydrodynamic coupling assumes a hydrodynamic retarding function. The drive train according to the invention is characterized in that a control is provided which, prior to and/or during a braking of the primary impeller, empties the working chamber of the hydrodynamic coupling to a given level of filling.